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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,070	06/14/2001	Hiroshi Tsuda	826.1730	6446

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EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
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2171

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DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/880,070

Applicant(s)

TSUDA, HIROSHI

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6, 10, 11, 14-16, and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat No 6,675,170 issued to Flake (hereafter Flake).

Claim 1:

Flake discloses a method for collecting documents linked to each other from a network by crawling the network [Fig 1, 104] comprising:

- collecting documents equal to or larger, in number, than a predetermined value from inside a community through the network based on a reference of the document [seed set of related www sites 100, Fig 1, col 4, lines 23-32],
- collecting documents from inside and outside the community based on the reference of collected documents after collecting the documents equal to or larger in number than the predetermined value from inside the community [subset 102 , Fig 1, col 4, lines 23-32]

Claim 2:

Flake discloses computing a significance level indicating a level of significance of the collected document according to the reference of the collected document, and information about

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a position of the collected document in the network; and determining a document to be collected based on the reference and the significance level [col 2, lines 45-54].

Claim 3:

Flake discloses wherein said document to be collected is determined separately for inside the community and for outside the community [col 4, lines 23-32].

Claim 4:

Flake discloses presenting a result of retrieving the collected documents separately for inside the community and outside the community [col 3, lines 24-30].

Claim 6:

Flake discloses providing a positive sample document group which is a document group relating to a field, and a negative sample document group which is a document group less related to the field; determining a document which is to be collected and is related to the field based on a reference to the positive sample document group and the negative sample document group; and collecting the document to be collected from the network [col 4, lines 23-32]

Claim 10:

Flake discloses summarizing said collected document group based on a referencing expression used in the collected document group [col 4, lines 23-32]

Claim 11:

Flake discloses assigning a keyword to the collected document based on a referencing expression used in the collected document [col 4, line 16].

Claim 14:

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Flake discloses counting a reference frequency at which each collected document is referenced by the referencing expression when the number of different documents is smaller than a predetermined value; and determining whether or not the referencing expression is assigned as the keyword based on the number of different documents and the reference frequency [col 4, lines 19-22]

Claim 15:

Flake discloses combining the keyword based on the referencing expression with a keyword extracted from text of the collected document, and a keyword extracted from information indicating a position in the network about the collected document [col 3, lines 12-35]

Claim 16:

Flake discloses transmitting information for retrieval of the document to a server; and receiving the document retrieved separately from inside and outside the community according to the information for retrieval together with information indicating a significance level for the community [col 5, lines 1-5]

Claim 18:

Flake discloses a document collection apparatus collecting a document from a network, comprising: a next prospect determination unit determining a prospect to be collected next based on a reference between a positive sample document group which is a document group related to a field and a negative sample document group which is a document group less related the field; and a document collection unit collecting the prospect from the network [col 4, lines 23-32]

Claim 19:

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Flake discloses a computer-readable recording medium recording a program used to direct a computer to control collection of a document from a network, comprising: collecting documents equal to or larger, in number, than a predetermined value from a community through the network based on a reference of the document; and collecting documents from inside and outside the community based on the reference of collected documents after collecting the documents equal to or larger, in number, than the predetermined value from inside the community [col 3, lines 12-35, col 4, lines 23-32]

Claim 20:

Flake discloses a computer-readable recording medium recording a program used to direct a computer to control collection of a document from a network, comprising: providing a positive sample document group which is a document group relating to a field, and a negative sample document group which is a document group less related to the field; determining a document to be collected relating to the field based on a reference to the positive sample document group and the negative sample document group; and collecting the document to be collect from the network [col 3, lines 12-35 and col 4, lines 23-32]

Claim 21:

Flake discloses a computer data signal embodied on a carrier expressing a program used to direct a computer to control collection of a document from a network, said program allowing the computer to perform the process comprising: collecting documents equal to or larger than, in number, a predetermined value from inside a community in the network based on a reference of the document; and collecting documents from inside and outside the community based on the

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reference of collected documents after collecting documents equal to or larger, in number, than the predetermined value from the community [col 3, lines 12-35 and col 4, lines 23-32]

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-9, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flake.

Claim 7:

Flake discloses the elements of claim 6 as noted above.

Flake fails to disclose computing a reference score indicating a level at which a document is referenced only by a document in the positive sample document group based on the reference; and determining a document having a high reference score as the document to be collected.

However, Flake discloses applying a maximum flow algorithm and a further search on the subset of documents to determine a subset of a more desired type of document [col 3, lines 12-23].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Flake to include computing a reference score indicating a level at which a document is referenced only by a document in the positive sample document group based on the

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reference; and determining a document having a high reference score as the document to be collected.

The ordinarily skilled artisan would have been motivated to modify Flake per the above for the purpose of focusing the search to the most important element.

Claims 8 and 9:

Flake discloses the elements of claim 6 as noted above.

Flake fails to disclose wherein computing a co-reference score indicating a level at which a document is referenced together with a document in the positive sample document group for a document referenced by a collected document referring to a document in the positive sample document group based on the reference; and determining a document having a high co-reference score as the document to be collected.

However, Flake discloses applying a maximum flow algorithm and a further search on the subset of documents to determine a subset of a more desired type of document [col 3, lines 12-23].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sato '517 to include wherein computing a co-reference score indicating a level at which a document is referenced together with a document in the positive sample document group for a document referenced by a collected document referring to a document in the positive sample document group based on the reference; and determining a document having a high co-reference score as the document to be collected.

The ordinarily skilled artisan would have been motivated to modify Flake per the above for the purpose of searching for documents based on the most important two keywords.

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Claim 12:

Flake discloses the elements of claim 1 as noted above.

Flake fails to disclose not assigning a keyword based on the referring expression when the referencing expression is used regardless of a content of a referenced document.

Official Notice is taken that not assigning a keyword based on the referring expression when the referencing expression is used regardless of a content of a referenced document

The ordinarily skilled artisan would have been motivated to modify Flake per the above for the purpose of searching for new material that is not covered by a keyword.

Claim 13:

Flake discloses the elements of claim 11 as noted above.

Flake discloses counting a number of different documents referenced using the referencing expression [col 3, lines 30-35]

Flake fails to disclose not assigning the keyword based on the referencing expression when the number of different documents is equal to or larger than a predetermined value.

It would have been obvious to modify Flake to include not assigning the keyword based on the referencing expression when the number of different documents is equal to or larger than a predetermined value.

The ordinarily skilled artisan would have been motivated to modify Flake per the above for the purpose of improving the invention by determining a significant group of documents which are not covered by a keyword.

5. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flake in view of US Pat No 6,078,913 issued to Aoki et al (hereafter Aoki).

Claims 5 and 17:

Flake discloses the elements of claims 1 and 2 as noted above.

Flake discloses a document collection apparatus collecting a document from a network, comprising: a next prospect determination unit determining a prospect to be collected next based on a reference of a collected document; and a document collection unit collecting the prospect from the network, wherein said document collection unit collects the prospect from inside and outside the community after collecting documents larger in number than a predetermined value from inside the community [

Flake fails to disclose a community determination unit determining whether or not the prospect is in a community in the network according to information indicating a position in the network of the prospect.

Aoki '913 discloses a community determination unit determining whether or not the prospect is in a community in the network according to information indicating a position in the network of the prospect [Fig 1 and col 5, lines 12-35].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Flake to include a community determination unit determining whether or not the prospect is in a community in the network according to information indicating a position in the network of the prospect as taught by Aoki '913.

The ordinarily skilled artisan would have been motivated to modify Flake per the above for the purpose of improving the invention by providing information regarding whether the information is in the local system or in the remote system

Response to Arguments

Applicant's arguments filed 12/19/2003 with respect to claims 1-21 have been considered but are moot in view of supra new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620.

The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux

3/10/2004



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